

Date: Thursday, 19/06/2008 2:35:56 PM  
 User: Julie Lecocq

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	350 SKIDTUBE ASSEMBLY LH
<b>Job Number</b> :	39971		
<b>Estimate Number</b> :	10262		
<b>P.O. Number</b> :		<b>Part Number</b> :	D350636011
<b>This Issue</b> :	19/06/2008	<b>Drawing Number</b> :	D2750 UNDER REVIEW
<b>Prsht Rev.</b> :	NC	<b>Project Number</b> :	N/A
<b>First Issue</b> :	1/1	<b>Drawing Revision</b> :	E
<b>Previous Run</b> :	39970	<b>Material</b> :	
<b>Written By</b> :		<b>Due Date</b> :	05/07/2008
<b>Checked &amp; Approved By</b> :	JUD 08.6.19	<b>Qty:</b>	1 Um: Each
<b>Comment</b> :	Est Rev: I 02.09.25 Rearranged procedure steps KJ Est Rev: J 06-03-23 As per Rev D JLM Est Rev: K 06-07.13 As per dsi9343 EC Est Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC Est Rev: M 08-04-22 update steps 4, 13 DD verified by: EC		

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	DC	DOCUMENT CONTROL
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JUD 08.6.20



Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-011-CHG 003

CHG 004

0010102

2.0	D26003BENT	Extrusion Bent
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

B39714

D # 8-6-23

3.0	D2744	Cap
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch:

B37768

D # 8-6-23

4.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
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Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 &amp; DT8863.

D # 8-6-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)					
DATE	STEP	Description of NC Section A	Corrective Action Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng			

NOTE: Date & initial all entries

Date: Thursday, 19/06/2008 2:35:56 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for Detail G using DT8330

5-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 5 holes per side) as per dwg D2750 .Open up holes for ground handling and detail E to 0.500" (8 holes per side)

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108

\*\*\*\*Make sure that wearplate holes are on bottom of tube\*\*\*\*\* Open 4 aft wearplate holes to 0.250". Open remaining wearplate holes to 0.297"

7-Open up holes of Detail A to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004.Fill grooves in bend left from bending as per QSI 004  
A/R Aluminum Rod *m107877* *86* *08/06/23*

10-Grind welds flush as per Dwg D2750

12- Scribe batch# inside per dwg D2750

5.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION



W/O:		WORK ORDER CHANGES						
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Web

Batch:

B 39983

D H 8-6-23

10.0

D34901

Cross Bolt Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch:

39600

SL 8-6-24

11.0

D34903

Cross Bolt Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch:

32659

SL 8-6-24

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Crossbolt Spacer

Batch:

37767

SL 8-6-24

13.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail E and ground handling to 0.625" (total of 8 holes per side)  
as per dwg D2750.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side)  
as per dwg D2750.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail B, E, ground handling and float holes per dwg D2750 (welding instructions on  
sheet 4)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

SL

8-6-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291

batch: M107393

exp. date: 3-10-1

SL 3-6-23

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004  
(welding instructions on sheet 4)

A/R Aluminum Rod

batch:

M108096

SL 8-6-24

9-Grind welds flush as per Dwg D2750

10-Spot face ground handling holes section P-P (total of 4 places per side) as per dwg D2750

11-Deburr holes

SL 8-6-24

14.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 08/06/25 (X)

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/06/25 (X)

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

M. 08/06/26

17.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

START TIME:

1:15

M 107925

OVEN TEMPERATURE:

320°

FINISH TIME:

1:45

SL 08-06-26 (X)

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

08-06-26 (X)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

ALS41032225

Insert



Comment: Qty.: 42.0000 Each(s)/Unit Total: 42.0000 Each(s)

Insert

Batch: M1100489

JS

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install inserts as per Dwg D2750

JS 08-06-26

PTU

21.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Bushing

Batch: B39587

JS BR

22.0

D353513

D3793-1

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: ~~1554584~~ B39715

BR

23.0

D353525

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B39716

BR

24.0

D353535

D3793-3

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B39812

BR

25.0

D353613

D3794-1

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B39421

BR

08-06-26


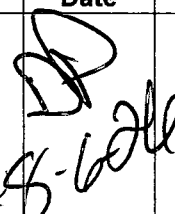

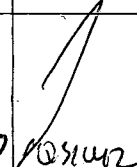

BR

BR 08-07-01

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-636-011 PAR #: N/A Fault Category: Prod/Skittle NCR: (Yes) No DQA: 1D Date: 08/07/03  
 QA: N/C Closed: 1D Date: 09/07/04

NCR: 39971		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
080626	220	Tube was found to have an insert hole missing, inboard 7th hole from the aft. R.C. Lack of attention when drilling and inspecting.		drill hole & deburr. touch up hole with blockline. JD 08-06-26				

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:	Machine Or Operation:	Description :
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26.0	D353625	Gasket
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B 39234

BR

27.0	D353635	Gasket
------	---------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B 39422

BR

CHK 504

28.0	D35371	Wearpad
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Comment: Qty.: 5.0000 Each(s)/Unit Total: 5.0000 Each(s)

WEARPAD

Batch: B 38941

BR

PTO

29.0	D36311	Washer
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Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

WASHER

Batch: B 38139 (5)

BR

30.0	D3488041	Blade Fitting Assembly, LH
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Blade Fitting, LH

Batch: B 38786

BR

31.0	D3492041	Plug Assembly
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Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

PLUG ASSEMBLY

Batch: B 39725

BR

32.0	D3492043	Plug Assembly
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Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

PLUG ASSEMBLY

Batch: B 39601

BR

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08.06.27	23	PER DSI 9413 ADD: D3791 WEARPLATE (1) B <u>39418</u> (F0) ANS26C1032R10 <sup>SCREW</sup> WEARPLATE (4) M <u>108062</u> (F0) " R19 " (4) M <u>108079</u> (F0) D3072-1 WASHER (8) B <u>39275</u> (F0)	PH 32 080701	03.06.27 080701	ALL	PH 07.06.27 QSI042	680702	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Date: Thursday, 19/06/2008 2:35:56 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:	Machine Or Operation:	Description :
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33.0	AN3C5A	Bolt
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34 ~~pt~~ 01.06.27



Comment: Qty.: 3 ~~38~~.0000 Each(s)/Unit Total: ~~38~~.0000 Each(s)

Bolt

Batch: ~~M 1071230~~ M 108302

BR

34.0	AN3C6A	BOLT
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

Batch: M 105300

BR

35.0	AN3C7A	BOLT
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

BOLT

Batch: ~~M 1071230~~

BR

36.0	AN6C44A	BOLT
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Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

BOLT

Batch: M 108284

BR

37.0	AN8C35A	BOLT
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

BOLT

Batch: M 108896

BR

38.0	AN960C10L	washer
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Comment: Qty.: 3 ~~38~~.0000 Each(s)/Unit Total: ~~38~~.0000 Each(s)

washer

Batch: M 108077

BR

39.0	AN960C816L	WASHER
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Comment: Qty.: 1.2000 Each(s)/Unit Total: 2.0000 Each(s)

WASHER

Batch: M 107320

BR

BR 08-07-01 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

40.0

MS210436

NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

NUT

Batch: M 108255

BL 08-07-01

41.0

MS21083C8

NUT



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

NUT

Batch: M 108255

BL

42.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

WASHER

Batch: M 107394

BL

43.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WASHER

Batch: M 107394

N/A

PH  
07.06.27

44.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch M 106096

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: M 107888

EXP DATE: 08-11

BL 08-07-01

4-Coat all exposed fasteners with "LPS Procyon"

batch M 104251

BL 08-07-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

45.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/07/01 (40)

46.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

47.0

D2741

Blade, 350 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade

Batch: 38558

SP

48.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

Batch: 107924

SP

49.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

Batch: 107530

SP

50.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: 107581

SP

51.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

Batch: 108255

8/7/11

SP

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 39971

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

52.0

D34931

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: 38757

SP

53.0

D35321

Spacer



Comment: Qty.: 2.0000 (s)/Unit Total : 2.0000 (s)

batch: 38594

8/7/11

(X)

SP

54.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S 08/07/03

55.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-011

G Pc 8/7/2

56.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/07/03

Job Completion



MF 08-07-03

B 39971

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

**DART****RELEASED**  
07.08.02

DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>H</i>	DRAWING NO. <b>D2750</b>	REV. E SHEET 1 OF 5
DATE <b>07.05.17</b>		TITLE <b>350 SKIDTUBE ASSEMBLY</b> SCALE NTS	
REV	DATE	DESCRIPTION	
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE MS24694-S293 TO AN8-16A	
C	98.11.18	ADD D2750-3 / D2750-4; INCORPORATE D2738 AND D2740	
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133 / 9157	
E	07.05.17	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY(38) NAS1515H3L; REMOVE QTY(10) NAS1515H8L; REMOVE D2741, QTY(2) AN960C816; REMOVE QTY(2) MS21083C8	

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-13	WEARSHOE
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3535-35	WEARSHOE
1	1	1	1	D3536-13	GASKET
1	1	1	1	D3536-25	GASKET
1	1	1	1	D3536-35	GASKET
5	5	5	5	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
42	42	42	42	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
2	2	2	2	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER
2	2	2	2	NAS1515H8L	WASHER

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DATE <b>07.05.17</b>		TITLE <b>350 SKIDTUBE ASSEMBLY</b>	SCALE NTS

GENERAL NOTES:

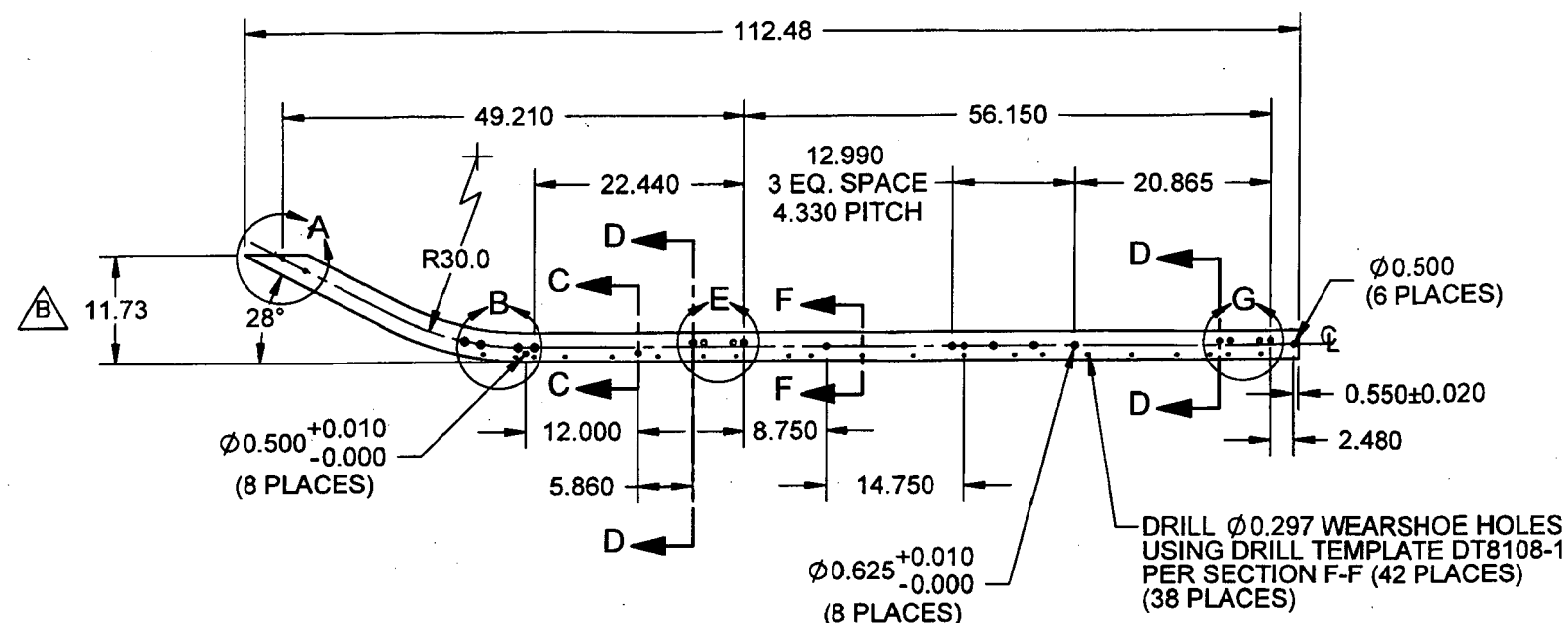
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*07-08-02 [Signature]*

1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.150 \pm 0.010$  IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.15 \pm 0.030$  IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C, D-D AND F-F.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:  
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES ( $\emptyset 0.297$ ) FOR WEARSHOE INSERTS.
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS POWDER COATING WITH MEK DEGREASER.

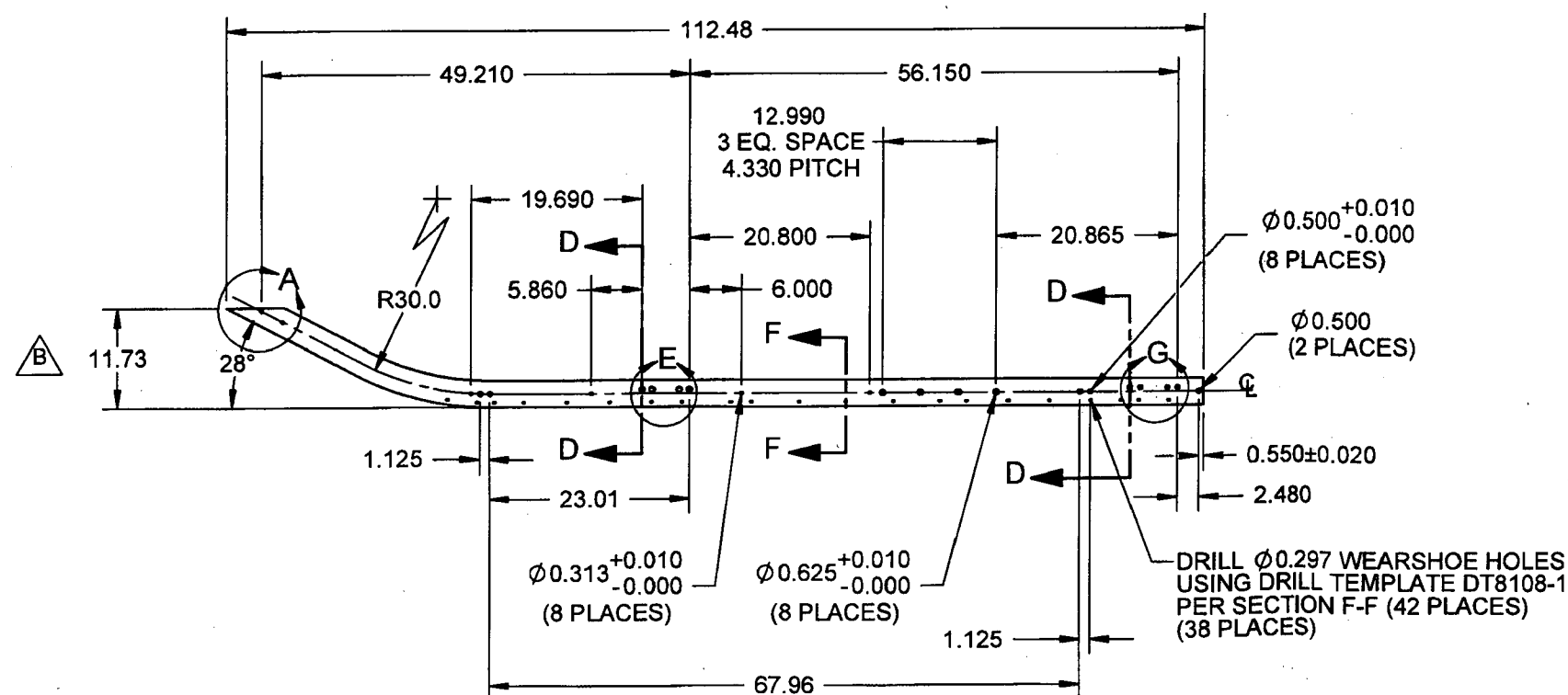
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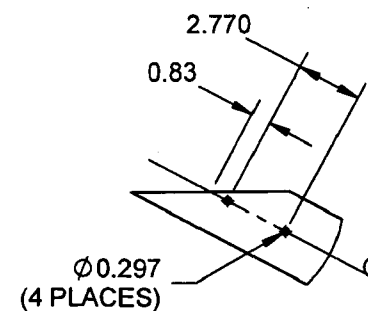
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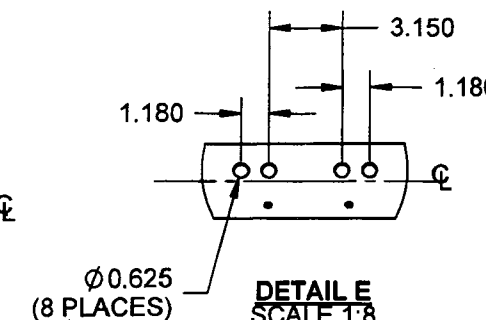
**D2750-1 LH SKIDTUBE (SHOWN)**  
**D2750-2 RH SKIDTUBE (OPPOSITE)**



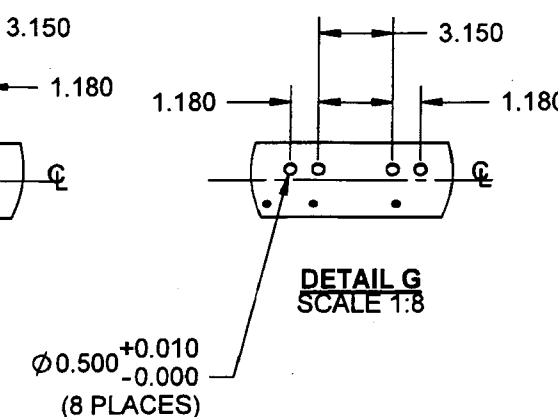
**D2750-3 LH SKIDTUBE (SHOWN)**  
**D2750-4 RH SKIDTUBE (OPPOSITE)**



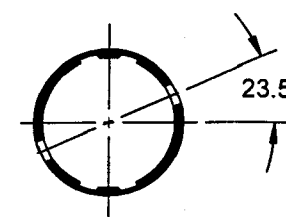
**DETAIL A**  
SCALE 1:8



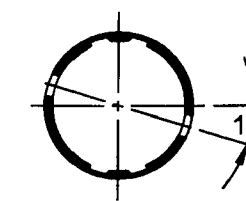
**DETAIL E**  
SCALE 1:8



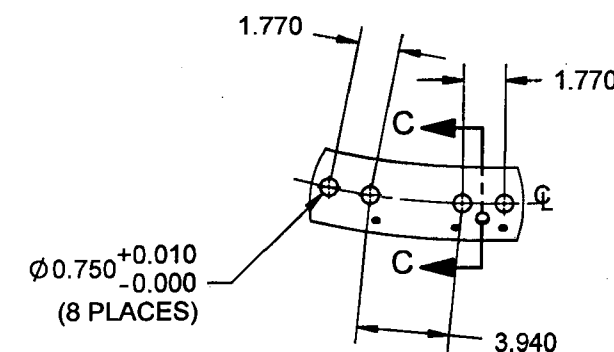
**DETAIL G**  
SCALE 1:8



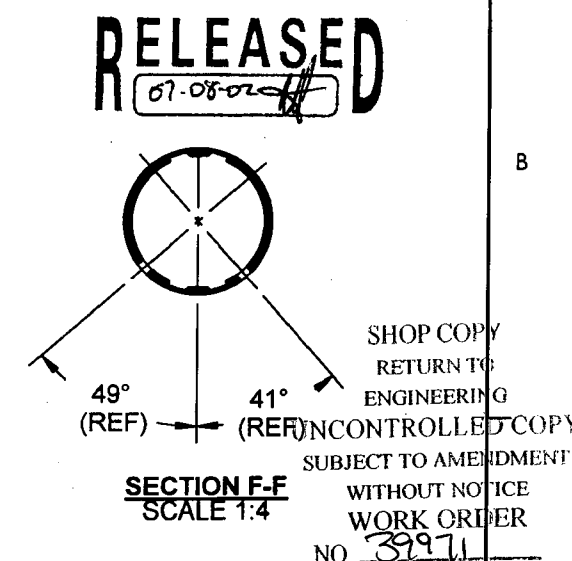
**SECTION C-C**  
SCALE 1:4



**SECTION D-D**  
SCALE 1:4



**DETAIL B**  
SCALE 1:8  
(ALL DIMENSIONS ARE STRAIGHT LINE DIMENSIONS)



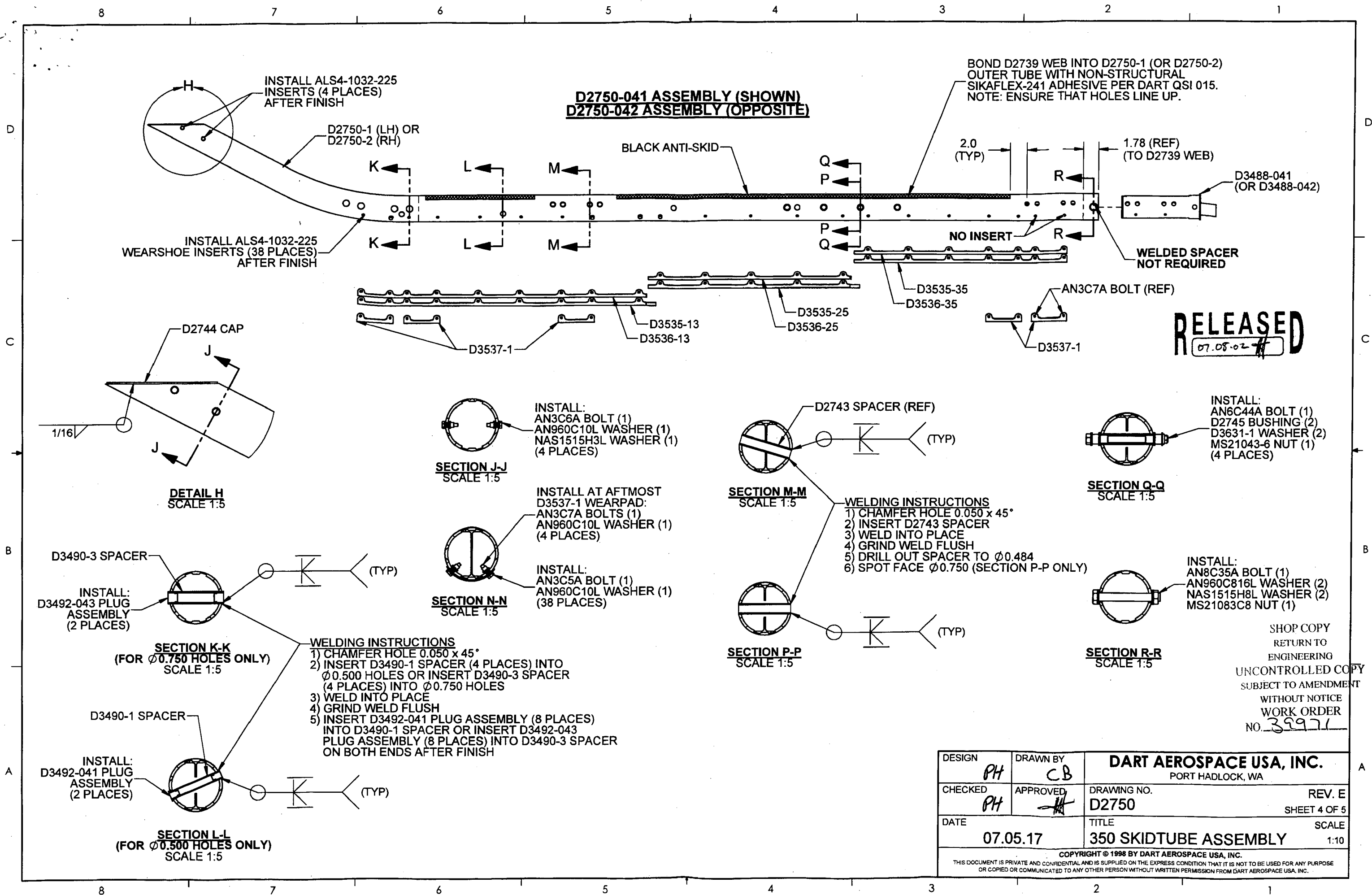
**SECTION F-F**  
SCALE 1:4

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DATE <b>07.05.17</b>		TITLE <b>350 SKIDTUBE ASSEMBLY</b>	SCALE 1:20
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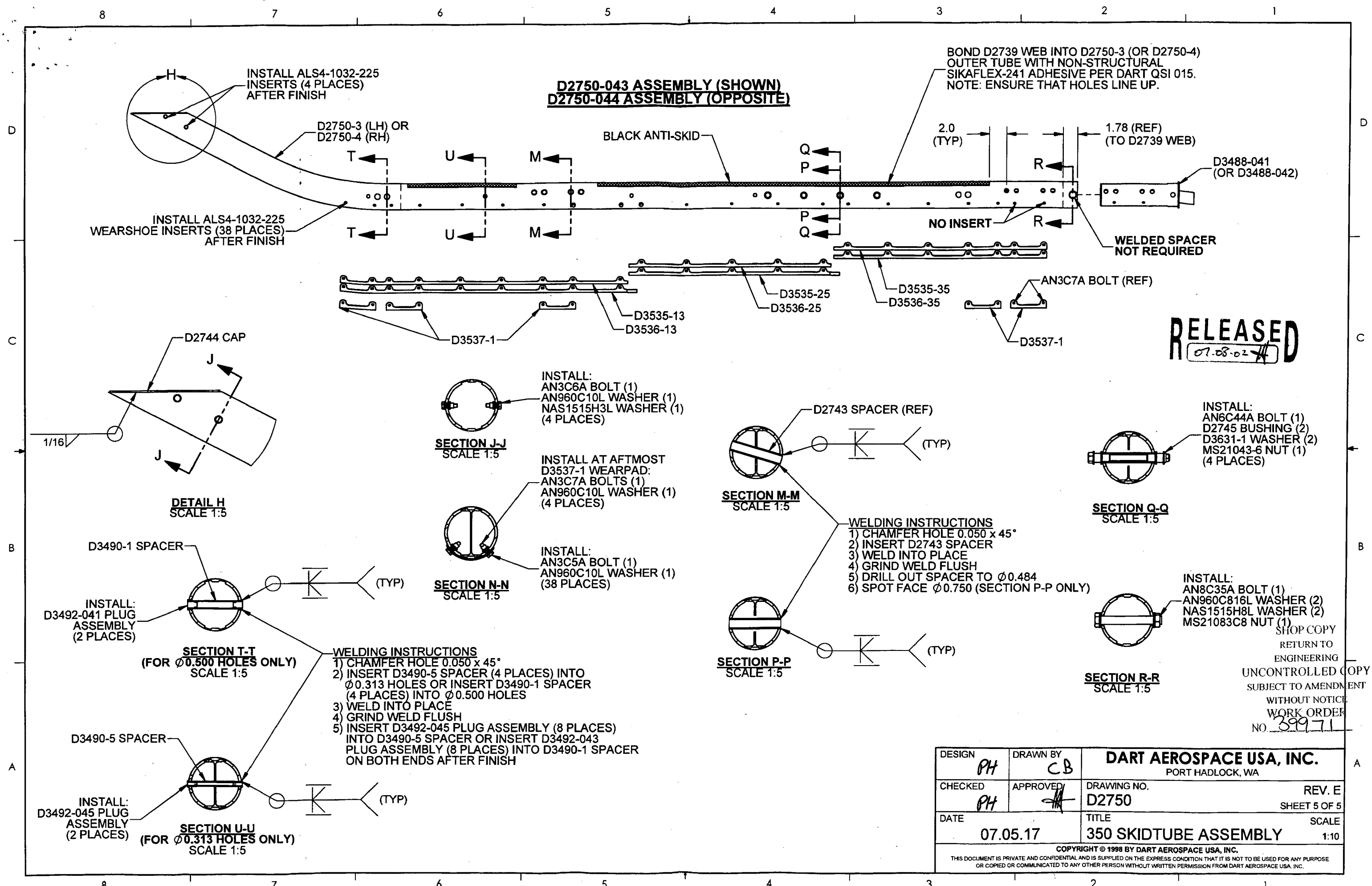
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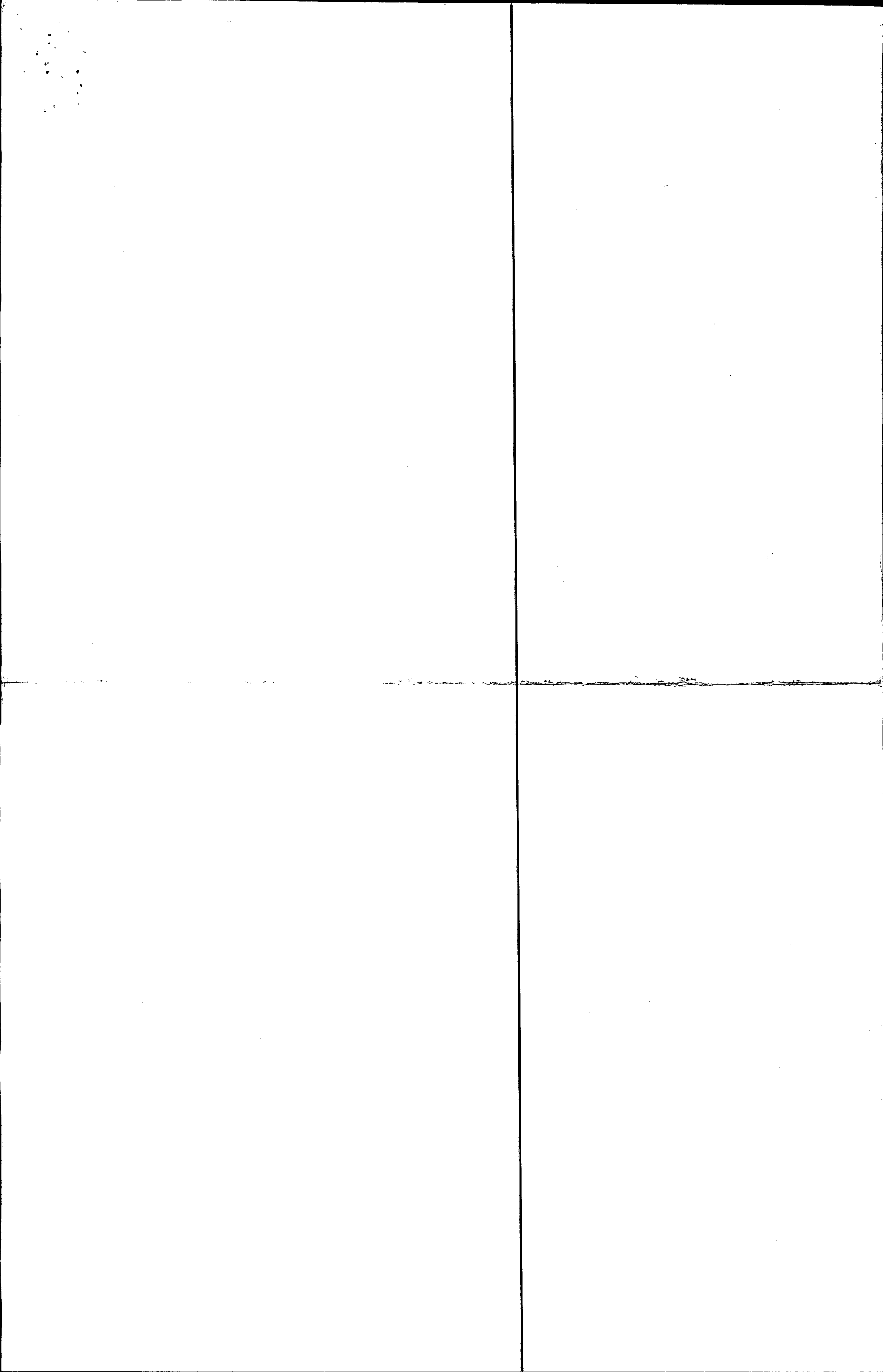






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DATE <b>07.05.17</b>		TITLE <b>350 SKIDTUBE ASSEMBLY</b>	SCALE 1:10
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NO. 159

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliot  
Job number: 39964  
Part number: D350 636012  
Description: 350 skid  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminium  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:  
Penetration:

pass[☒] fail[ ]  
pass[☒] fail[ ]

UNACCEPTABLE

Cracks:  
Undercut:  
Pin holes:  
Overlap (cold lap)  
Porosity (surface):  
Coloration:

pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]

Qualifier Pd. Dugl. Date of Test Coupon 08-06-23

Welder Barclay Elliot Date of Test Coupon 08-06-23

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

# DART SERVICE INSTRUCTION

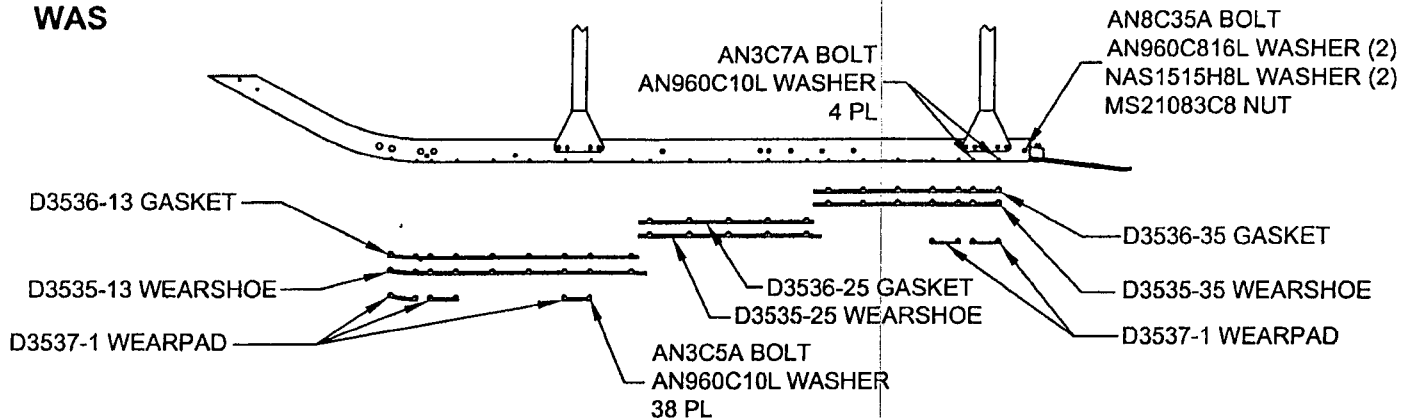
TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-636 REV E

REF FAA STC: SR00646SE

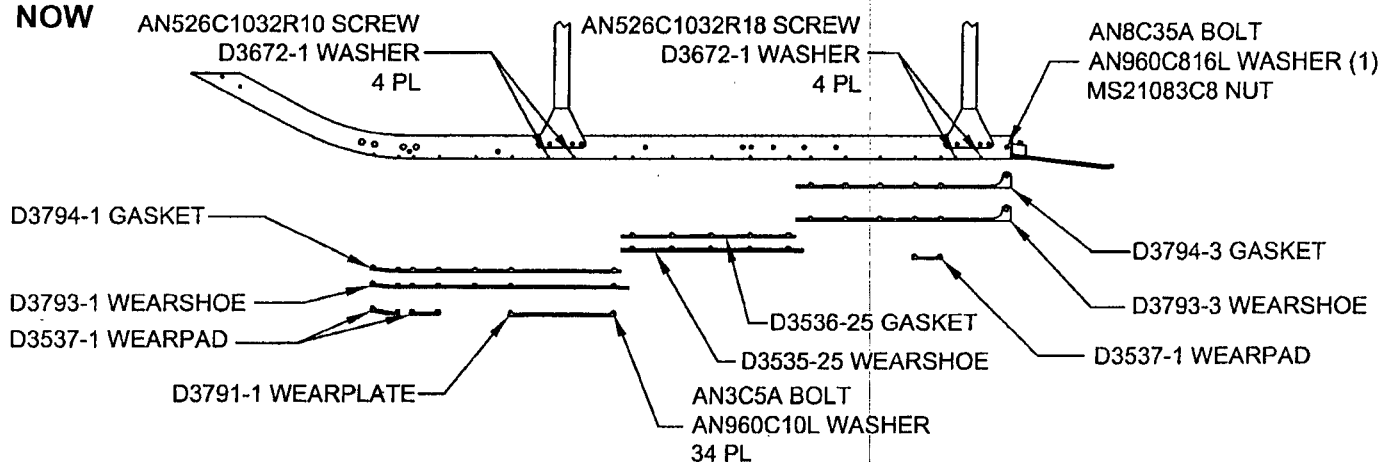
REF CANADIAN STC: SH99-7

THE WEARPLATES ON D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004 (AND LATER) HAVE BEEN MODIFIED AS SHOWN IN FIGURE 1 BELOW TO ELIMINATE THE POSSIBILITY OF INTERFERENCE BETWEEN THE WEARPLATES AND CROSSTUBE SADDLES AT INSTALLATION. THERE IS NEGLIGIBLE WEIGHT CHANGE ASSOCIATED WITH THIS MODIFICATION.

**WAS**



**NOW**



**FIGURE 1 - WEARPLATE MODIFICATION**

(AN526C1032RXX SCREW LOCATIONS NO LONGER USED TO MOUNT WEARSHOES)

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MFG. APPR.	N/A	DSI 9413	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE MODIFICATION	NTS
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FOR D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004, AMEND PARTS LIST OF IIN-D350-636 SECTION 5 AS FOLLOWS:

REMOVE:

Item	Qty -011	Qty -012	Qty -013	Qty -014	Part Number	Description
	X				D350-636-011	SKIDTUBE INSTALLATION, LH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
		X			D350-636-012	SKIDTUBE INSTALLATION, RH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
			X		D350-636-013	SKIDTUBE INSTALLATION, LH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
				X	D350-636-014	SKIDTUBE INSTALLATION, RH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
*6A	1	1	1	1	AN960C816L	WASHER
6B	2	2	2	2	NAS1515H8L	WASHER
*22	2	2	2	2	D3537-1	WEARPAD
23A	1	1	1	1	D3535-13	WEARSHOE
23B	1	1	1	1	D3536-13	GASKET
25A	1	1	1	1	D3535-35	WEARSHOE
25B	1	1	1	1	D3536-35	GASKET
*26A	4	4	4	4	AN3C5A	BOLT
*26B	4	4	4	4	AN3C7A	BOLT
*27	8	8	8	8	AN960C10L	WASHER

\*SUBTRACT FROM TOTAL QUANTITY OF PARTS INDICATED IN INSTALLATION INSTRUCTIONS IIN-D350-636

ADD:

Qty -011	Qty -012	Qty -013	Qty -014	Part Number	Description
X				D350-636-011	SKIDTUBE INSTALLATION, LH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
	X			D350-636-012	SKIDTUBE INSTALLATION, RH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
		X		D350-636-013	SKIDTUBE INSTALLATION, LH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
			X	D350-636-014	SKIDTUBE INSTALLATION, RH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
8	8	8	8	D3672-1	WASHER
4	4	4	4	AN526C1032R10	SCREW
4	4	4	4	AN526C1032R18	SCREW

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MFG. APPR.	N/A	DSI 9413	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE MODIFICATION	NTS
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TO IMPROVE THE INSTALLATION OF D350-636-011/-012/-013/-014 SKIDTUBES EQUIPPED WITH STAINLESS WEARPLATES/WEARPADS AND GASKETS (CHG 003) ONTO THE CROSSTUBES, THE FOLLOWING DSI 9413-011 WEARSHOE KIT CAN BE PROCURED FROM DART:

Qty -011	Part Number	Description
X	DSI 9413-011	WEARSHOE MODIFICATION KIT
1	D3791-1	WEARPLATE
1	D3793-1	WEARSHOE
1	D3793-3	WEARSHOE
1	D3794-1	GASKET
1	D3794-3	GASKET
8	D3672-1	WASHER
4	AN526C1032R10	SCREW
4	AN526C1032R18	SCREW

TO INSTALL THE DSI 9413-011 KIT, REMOVE THE EXISTING WEARSHOES/GASKETS UNDER THE FWD/AFT SADDLES AND INSTALL NEW WEARSHOES/GASKETS AS SHOWN IN FIGURE 1. PLUG UNUSED HOLES WITH AN526C1032RXX SCREWS AND D3672-1 WASHERS. INSTALL SCREWS WITH SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS 'B2' SEALANT AS SHOWN IN FIGURE 1. NOTE: SOME OF THE PREVIOUSLY INSTALLED HARDWARE IS NO LONGER REQUIRED.

THE FOLLOWING D350-636-045 REPLACEMENT WEARPLATE KIT WILL BE AVAILABLE FOR D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004 OR LATER:

Qty -011	Part Number	Description
X	D350-636-045	WEARSHOE KIT
3	D3537-1	WEARPAD
1	D3535-25	WEARSHOE
1	D3536-25	GASKET
1	D3791-1	WEARPLATE
1	D3793-1	WEARSHOE
1	D3793-3	WEARSHOE
1	D3794-1	GASKET
1	D3794-3	GASKET
34	AN3C5A	BOLT
34	AN960C10L	WASHER

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DE APPR.		WEARSHOE MODIFICATION	NTS
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